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ABSTRACT

The role of the professional in society and problems and advantages of professional education are examined. Summarized in the report are some of the literature concerning factors which influence the form and content of continuing education for professionals; and attention is directed to the implications of this literature for program development by the Medical Library Association. The advantages and disadvantages of continuing education programs developed by business and industry, unions, associations, and the federal government are discussed. The writer feels that the most effective agency for coordinating the activities of these various sponsors of continuing education programs is the professional association. (Author/AP)

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PROBLEMS AND PROGRAMS IN CONTINUING PROFESSIONAL EDUCATION

Melissa Mickey

1974

WORKING PAPER NO. 1

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The Role of the Professional in Society

Continuing Professional Education is not a new concept. Solon, Confucius, and Hippocrates all advocated the kind of continuous personal growth and development which we today characterize as continuing professional education.[1] Society has always regarded the professional as a special type of individual — one who is socially-oriented, altruistic, and responsible for the making of decisions in his area of expertise which only he is qualified to make.

> The practitioners of the professions are neither scientists nor artists, because all professionals are concerned with variations of the decision-making discipline . . . Whereas the results of scientific investigations are generally independent of time and place, the answers to professional problems are almost always unique in regard to particulars of time and place . . . The professional's design process must contain elements that the scientist's seldom if ever requires, and prime among these differences are the needs for both an explicit value system and formal optimization procedures.
>
> The challenge to the professions can be described in terms of the new concept that has taken hold in today's social jargon: the gap. We speak with disdain of the credulity gap in politics and we speak with distress of the generation gap in families. Yet of far greater significance is the gap which goes unrecognized by society at large - the discontinuities between the needs and aspirations of an everchanging, expanding society, and the responsibilities of the professionally trained citizens who alone are equipped to meet these requirements; between the increasing problems of growing nations accelerated by technological developments,

> and the emergence of the professionally educated who are able to resolve them.[2]

It is generally agreed that continuing education is a necessity for a professional practitioner who hopes to perform well in this large role which society has assigned to him.

The purpose of this paper is to summarize some of the literature concerning factors which influence the form and content of continuing education programs for professionals, and to point out the implications of this literature for program development by the Medical Library Association.

Professional Education

There can be little argument with the statement that the design of continuing professional education programs depends largely upon the type of pre-professional and professional education which has been given to those entering the profession. The need for professional continuing education today is only an aspect of the need for a revolutionized plan of professional education in general. It is the opinion of many experts in various professions that professional education in the United States has reached a crisis point where sweeping changes in design must occur.

Professional education programs today are hampered by the unfortunate premise that they are responsible for exposing the professional-to-be to all the professional education he will ever receive. This leads the programs to concentrate on broad theoretical knowledge which will be of use to the practitioner only in the advanced stages of his practice, when he has achieved positions of much greater responsibility, rather than giving him the specialized knowledge to perform the basic professional tasks at a high level of efficiency.

Peter Drucker in his book the Age of Discontinuity has made several useful suggestions for the reform of professional education.

> . . . . When knowledge is applied to work, we need continuing education, that is, the frequent return of the experienced and accomplished adult to formal learning. The implications of this point are not yet fully seen. One implication is that we can now recognize the period in a person's life and a career when a given subject matter is learned best . . . . many subjects, for example, are better learned by experienced older men. Management is one of them. In the law, in medicine, in engineering, in education, in architecture and in many other fields, there are, equally, areas that the inexperienced youngster can hardly learn and the beginner rarely needs. The most important areas in any practice are as a rule accessible most easily to the man of experience and are most meaningful to him.
>
> Continuing education need not be education in specialized subjects of use only to the highly advanced professional. The most general subjects, philosophy, perhaps, or history, also make more sense as education for the experienced adult. Specialities are what the young learn best and need most.
>
> For what makes the generalist is the ability to hold a speciality against the sum total of experience, that is, to relate it to the general. To be sure, the young need a foundation in the general, and they need the big vision but the synthesis which is the true generalization is largely meaningless to them. For this reason, continuing education may be where the true generalist will come into being. It may be the stage where we look at the "big picture," where we can take "the philosophical view" and where we can ask, "what does it all mean?"[3]

Examples of dilemmas created for planners by the type of professional education given to practitioners-to-be can be found in engineering and accounting. Recent revisions in the curricula of engineering schools have apparently changed the typical engineering program from very specific, task-oriented training, to very theoretical generally-oriented education. According to the Joint Advisory Committee:

> There is now a significant difference between the preparation of recent engineering graduates and their counterparts of a decade or more ago. Large numbers of earlier graduates possess engineering experience which is no longer applicable and lack currently essential theoretical background. On the other hand, recent graduates possess much more sophistication technically, but still need instruction to be able to apply this knowledge effectively. For both of these groups, comprehensive systems of continuing engineering studies covering the spectrum from fundamental knowledge to engineering application are essential.[4]

In other words, planners of continuing engineering education must provide two divergent types of programs to suit two generations of engineers.

A related problem caused by the current state of basic engineering education is that there are several specialized fields which are simply not covered in engineering school courses. For example, refrigeration-air conditioning courses are often not available in standard college curricula due to the increasing emphasis on fundamentals of science and math in the engineering programs. Despite an increasingly heavy demand for engineers in this area the usual educational program of the mechanical engineering curriculum must be supplemented by knowledge obtained from outside the professional school.

> To train these people the community colleges, junior colleges, and trade and technical schools are offering the necessary courses, which are sometimes taught by full-time professors and sometimes by "moon-lighters" from industry. The courses range from highly technical and theoretical to the survey type, with principal emphasis on the state of the art and the characteristics of available equipment.[5]

A similar problem of unavailability of specialized knowledge in professional school programs is found in accounting, where the burden of training recruits already weights heavily on the hiring organization. In a recent article in the CPA Journal,[6] Lawrence C. Phillips points out the "decline of accounting as an academic subject" as the result of

gradual shifts of program emphasis in Colleges of Business toward the "Management School Concept" of broadly-trained business managers. Accountants ready to practice in business or public agencies simply are not being produced by professional schools.

Phillips argues that the accounting profession has only two alternatives:

> (1) To assume the full educational burden within the firm, accompanied by a massive extension of American Institute sponsored professional development activities; or (2) to encourage and support those schools that are able and interested in the pursuit of a professional school concept. The first alternative is far too costly and fails to provide the freedom of education which flourishes within the academic environment.[7]

He feels that the long-run image of accounting as a profession comparable to law and medicine seems to require a program conducted within a university-based professional school. In addition, the continuing expansion of the body of accounting knowledge and the complexities of accounting practice would necessitate prohibitive training costs for most firms. Phillips concludes that the professional development and staff training efforts of professional groups should complement rather than compete with or be employed as a substitute for university-level education.

Most professionals would probably agree with Phillips that this is a rational allocation of pre-professional training responsibilities. The responsibility of complementing and expanding basic educational opportunities must be divided among various sponsors, as will be discussed at some length later in this report. It simply remains to be pointed out that if the professional schools were providing basic practical decision-making oriented education, if they were producing professionals designed to meet the future needs of society (rather than the needs of society at

some point in the past, as interpreted by faculty members with little or no professional experience and no concern with speculating about the future), if they were selecting and training students with inquiring minds in the arts of learning how to learn, then the problems of providing continuing education for professionals would be much smaller than they appear to be.

Terminology

The process of program design for continuing professional education is hampered somewhat by the confusion which still reigns regarding the term "continuing education." According to Houle the term adult education refers to:

> ... the process by which men and women (alone or in groups) attempt to improve themselves by increasing their skills or knowledge, developing their insights or appreciations or changing their attitudes; or the process by which individuals or agencies attempt to change men and women in these ways.[8]

The late A.A. Liveright in his Study of Adult Education in the United States[9] explained that the term "adult education" has been superceeded by the term "continuing education" which is less value-loaded and has the broader connotation of life-long learning.

The philosophical implications of this change in terminology are illuminated by Carol Thomsen in "The Increasing Demands for Health Care, the Changing Role of the Nurse, and the Questions these raise for Continuing Education."

> Education, in terms of formal degree opportunities, relates directly to achieving upward mobility, increasing professional status and social and economic security. Education, in the purer sense, increases an individual's possibilities for fulfillment of his potential. The term adult education, yielding to the philosophy that one's own education is a single inte-

> grated process than a series of learning experiences separated by concrete developmental stages became Continuing Education. More specifically, it accounted for a change in the individual's motivation to learn, from pursuing advanced standing in a profession to the ultimate aim of improvement . . . [10]

Although the philosophical implications of the term "continuing education" are reasonably clear, Elizabeth Stone has pointed out that "the lack of any universally acceptable definition of continuing education, as revealed in the literature, is a stumbling block that has slowed down action in many professions."[11] Stone accepts the broadest definitions of continuing education which includes advanced degree seeking (beyond the first professional degree) and management and communication training, and incorporates all activities and efforts, formal and informal, by the individual to upgrade his knowledge, abilities, competencies, and understanding in his field of work or specialization so that he can become a more effective professional and be able to handle responsibilities of greater scope and accountability.[12]

This broad definition works effectively in Stone's report, which does indeed concern itself with efforts which fall into these various categories. For the purposes of a professional association engaged in program design, such a term is far too general. In Continuing Education for R&D Careers, there is a useful attempt to define continuing education rigorously in terms of precisely conceived objectives.

> It is increasingly common to distinguish between advanced education and continuing education, even though the two are frequently intertwined. The Interim Report of the Committee on Goals of Engineering Education (known popularly as the Goals Committee) lists four objectives of engineering education beyond the first basic degree. The report further indicates that the first of these objectives refers to advanced education - beyond the bachelor's degree - and the remaining three to continuing education. For general descriptive pur-

poses, this report uses their categories, which are as follows:

1. Upgrading a person's education (a person may work toward a graduate degree to raise the level of his formal capabilities.

2. Updating a person's education (a person who received a BS degree 10 years ago may wish to take course work to make his formal education comparable to that of a person receiving a BS degree this year).

3. Diversification to new fields (a person educated in one field may seek to obtain some formal education in another field, but not necessarily at a higher degree level).

4. Maturing of a person's education (a person may add a new perspective in his own field, such as the inclusion of financial, temporal, political, and social factors).

The Committee also notes one other important characteristic of continuing education studies, that they usually refer to training which better equips a person for his contemporary work, for the job he has now or aspires to in the near future. This, continuing education emphasizes practicality and immediacy, is contrast to basic professional education and to upgrading or the pursuit of advanced degrees in traditional ways.[13]

Since management training for scientists and engineers represents a shift out of the technical career line, most writers exclude it from continuing education. While such training could easily be taken as one kind of 'diversification' in the Goals Committee sense, it is neither a refreshment nor a continuation of the technical-scientific education of these specialists.[14]

In this study, the definitions given above are followed. Management training, "maturing," and degree-seeking studies are specifically excluded. The report refers to refreshing, updating, and diversification activities in engineering and scientific fields of study.[15]

Such laudable precision of terminology would certainly benefit any program design project.

There is one other term which is used heavily in several professions, most notably in accounting. The American Institute of CPA's has a "professional development" division. Referred to in accounting literature as "PD", professional development as a term seems subject to almost as much confusion as the general term "continuing education." "Professional development" in accounting is defined as a broad range of activities.

> Professional development is a continuing and planned series of experiences — technical and nontechnical, on and off the job, formal and informal, inside and outside the firm.[16]

The attraction of the term is that there is likely to be less disagreement about the purpose of "professional development" and less confusion with remedial level training than with the term "continuing education." It would be interesting to consider the possibility of adopting the term "professional development" as the designation of a particular level of "continuing education" for medical librarians, presumably the most advanced level of training.

Recommendations as to the definition of continuing education to be used in the M.L.A. program designing process will follow in the concluding section of this report. This report will utilize the broad definition of continuing education used by Stone.

Obsolescence

A survey of the literature of continuing professional education suggests that sudden spurts in educational activity seem to follow periods of crisis involving the traumatic discovery of high degrees of obsolescence prevailing among practitioners of a profession. General concern with technological obsolescence in our society came to a head with the launch-

ing of Sputnik. The subsequent furor surrounding this blow to national pride demanded remedial action from the engineering, scientific, and educational establishments.

Teachers in the United States, already under fire from the publicity given to the superior educational achievements of the Russian school-child, were harrassed by the increasing availability of comparative national test scores pointing out areas of serious weakness in the United States educational system. The discovery that "Johnny can neither read nor add" has pushed the local school systems into in-service training programs and the Federal Government into various legislative provisions to help support in-service training.

Social workers are being pressed into training programs to cope with rising costs of welfare services and the constant discovery of the extent of social ills, such as child abuse and drug addiction.

Other developments which have stimulated concern in some specific professions include the growing necessity to deal with computers in business and librarianship, the need for teachers and librarians to cope with the audio-visual media, and constant changes in laws and regulations which affect thousands of lawyers and accountants.

Although many professions now discuss the necessity for their practitioners to "keep up to date", the most detailed studies of obsolescence and its prevention have been conducted in the scientific and technological fields. A frequently cited study by Steven B. Zelikoff, "The Obsolescing Engineer,"[17] concluded that about 10 percent of an engineer's knowledge becomes obsolete every year. This rate of obsolescence is also increasing. For example, an aeronautical engineer graduating in 1935 was only 25 percent out of date five years later; an aeronautical engineer

in the class of 1965 became about 50 percent out of date in the same amount of time. Zelikoff noted that salaries for engineers have begun to reflect this trend. Los Angeles aerospace firms, he discovered, were paying an engineer with 35 years experience less, on the average, than an engineer with 20 years experience.

Obsolescence and its prevention is one of the major themes of the report Continuing Education for R&D Careers published by the National Science Foundation in 1969. Its perceptive comments seem worth quoting at length.

> Presumably, so long as the growth of scientific knowledge and new technology did not startingly challenge a professional's repertory of skills during the span of his career, technological obsolescence was commonly concomitant with aging; and continuing education was not an urgent matter. Widespread concern with technological obsolescence stems from the revolution in science and engineering --particularly in their academic curricula --which began during and after World War II . . . [18]

> Sometimes undefined, technological obsolescence in an individual is generally taken to mean a deficiency of knowledge such that he approaches problems with viewpoints, theories, and techniques less effective than others currently used in his field of specialization. Several types of obsolescent persons are readily identified. One is the man who has not kept up with new knowledge and techniques in his field. His professional competence ages in the face of scientific and technological growth, and makes him obsolescent as compared both to new graduates and to his colleagues who keep up and who apply new findings. A second type is the individual who keeps up with a very narrow segment of his field (usually by working in it for years), but who loses contact with broader changes. This second person is so 'overspecialized' that he cannot effectively undertake new work in his own or in closely related fields, and cannot apply relevant new knowledge from them to his own particular speciality. A third type is the person whose career line evolves from one interest to another, so that he moves away from his original field of training into another not very closely related one. He is obsolescent in his own speciality because his training is no longer closely integrated with his work. It is often more logical

than meaningful to classify such a person as obsolescent.[19]

> What has been said so far about technological obsolescence has assumed a context of 'overcoming' individual obsolescence, and indeed much of the literature has this orientation. However, in addition to the technological obsolescence of an individual who fails to use the latest knowledge and techniques in his field, there is also emphasis on obsolescence of knowledge and techniques themselves. For example, a few years ago an often-encountered saying cited 'the vacuum tube specialist in an era of transistors.' The transistors referred to were soon supplanted by smaller transistors, and now applications of solid state physics to printed circuits are sometimes supplanting small transistors. The use of superconductive materials may soon bring about still another instance of obsolescence in some of these technologies. This view of technological obsolescence emphasizes the changes taking place in knowledge itself as a source of the problems experiences by individuals.[20]

It would be very useful to planners of continuing professional education programs to know the amount of time which the average professional would need to devote to continuing education or professional development activities in a year. Estimates have been made for some areas of professional activity.

> On the basis of the figures on participation presented in this report, the scientist or engineer who makes a serious effort to prevent obsolescence must anticipate devoting, on the average, ten hours per week in work-related reading and from 40 to 80 hours per year in some combination of other modes of continuing education. This is the best estimate available of what experienced practitioners working on the frontiers of knowledge are now doing.[21]

John L. George and Samuel S. Dubin in Continuing Education Needs of Natural Resource Managers and Scientists asked 5,000 natural resource managers and scientists throughout the U.S. to indicate their current education needs.

> It was concluded that, merely to stay abreast, they should spend one day a week or the equivalent in regularly scheduled study. Training is needed in environmental management, interrelationships of the natural-resource scientist, social scientist, and

> planner, pollution and environmental quality, ecosystems, pollution biology, promotion of community interest in natural resources, and long-range planning.[22]

Technological advances are even affecting the blue collar worker. According to Stanley M. Grabowski, it is now an accepted fact that the blue collar worker must learn his trade three times before retirement.[23]

Although other professional fields have yet to be investigated, new studies on the prevention of professional obsolescence are appearing daily and reasonable estimates should soon be available to serve as goals for professional practitioners.[24]

Participation

The extent of participation in continuing education activities in general is increasing. Unfortunately, most studies of continuing education participation do not emphasize the type of professional education with which this report is concerned. There is very little data available on the activities of professional associations, as compared to the continuing education or adult education activities of educational institutions. There are, however, a few studies which give a partial picture.

The best known study of adult education participation was done by John Johnstone and Ramon Rivera for the National Opinion Research Center (financed by a grant from the Carnegie Corporation) during 1962 and 1963.[25] A.A. Liveright in his Study of Adult Education in the United States has summarized some of the findings of the massive (624 page) Johnstone and Rivera study. Some of the findings are:

> Some 24,810,000 adults participated in adult education programs during 1962. Participation by socio-economic group was "lower-lower" 3%, "working" 22%, "lower-middle" (clerical) 41%, "upper-middle" (professional, technical, managerial) 35% (upper-middle was 23% of sample).

The typical adult education participant in 1962 was described by Johnstone: He is just as often she; is typically under forty; has completed high school or better; enjoys about average income; works fulltime and most often in white-collar occupations; is typically white and protestant; is married and is a parent; lives in an urbanized area and more likely in the suburbs than inside the large city; and is found in all parts of the country but more frequently on the West Coast than would be expected by chance.

According to the NORC study the institutions sponsoring Adult Education were:

Institution	% of all courses taken
Churches and Synagogues	21
Colleges and Universities	21
Community Organizations	15
Business and Industry (excluding on-the-job)	12
Elementary and High Schools	12
Private Schools	7
Government - all levels	7
Armed Forces (excluding correspondence)	4
All others	2

Only 17 percent of all adults participating in adult education activities expressed interest or took part in courses offering credit (including certificates of achievement or completion). Of these, 8% sought high school diplomas, 23% sought first-degree college diplomas, 19% worked for higher degrees, and 50% worked for other kinds of certificates or diplomas.

32% of all courses taken were vocational in nature or by rearranging the data, education for occupational, vocational, and professional competence accounted for 39% of courses taken.

Initial exposure occured for 2 out of 3 before their thirtieth birthday. 65% of men and 45% of women took part in vocational programs as their first adult education activity.

The context of entry into first course was a job-connected situation for 68% of the men and 40% of the women.

Obstacles to Participation were cited as:

financial	43%
busy schedule	38%
lack of physical energy	27% [26]

In addition to the NORC study there are smaller studies of state and local participation. One such study was done by David C. Etter for the Oregon State System of Higher Education, Division of Continuing Education.[27] A 20-item questionnaire was mailed to 1,032 prospective continuing education and community service agencies in Oregon. Major findings included that: (1) Continuing Education and Community Service courses and allied learning opportunities are a 10 million dollar a year activity in Oregon; (2) Agencies are able to recover, on the average, 86% of the cost of their offerings; (3) The estimated average fee for enrollment was about $15.50; (4) The Division of Continuing Education provides the most clockhours of instruction of all Oregon agencies, and it serves more older adults than any other agency; (5) less than 10% of the 176 agencies studied concentrate on providing for blue collar workers and the poor; (6) 124 agencies reported that less than 9% of the funds they spent in 1969-70 came from outside funding sources; (7) Outdoor Recreation and Physical Education, Agriculture, and Safety and First Aid were the most frequent offerings during 1969-70, in that order.

A different view of participation, that of the sponsoring institution, is offered in a brief report by the University of British Columbia Extension Department in the "Trading Post" section of Adult Education.

> Response to the challenge of keeping up-to-date in professional fields is reflected in a 96% increase in enrollment in professional and technical courses offered by the University of British Columbia Extension Department ... in the past two years, 1965-66 to 1967-68. Over the two-year period the number of professional courses offered has risen from 85 to 198 (a 133% increase). . .

> Much of the gain in professional areas in the past two years is attributable to law and engineering programs which were expanded in 1966-67 with the appointment of full-time administrator-programmers in those areas and to the appointment this year of a second staff member in education extension. Professional and technical programs currently offered by UBC extension include: engineering, law, education, social work, agriculture, and fisheries. Other professional faculties organize their own continuing education programs: commerce and business administration, medicine, nursing, pharmacy and dentistry.[28]

A recent attempt to estimate the size of the continuing education activity in the United States was prepared by Charles B. Wood, Executive Director of AEA for Adult Leadership. According to Wood's findings:

> Adults have been going back to school in increasing numbers since World War II and the current year has seen an acceleration of the trend. Depending upon the information source, between 13 and 30 million adults will be in classrooms during the present school year. The 13 million figure represents the official estimate of the U.S. Office of Education; the 30 million represents a "guestimate" that includes all industrial training and various kinds of informal education at the community level.
>
> Of the 13 million estimated by USOE to be enrolled in the more formal kinds of adult education, 27.7 percent participate in public and private school education; 27.5 percent are enrolled in industry job-training; 25.2 percent in university and college degree and non-degree programs; 13.4 percent are taking courses conducted by such community-based organizations as libraries and museums; eight percent are enrolled in correspondence courses; 5.8 percent are students in private tutorials at various levels; and 10.3 percent are engaged in other non-defined activities.
>
> The most common motivation for the adult to return to school remains career advancement, but an increasing number--estimated at a third of the total--are enrolling for the joy of learning. Whatever the motive, the latest figures indicate the growing place of adult education in the American learning scheme.

> "Today," Dr. George Aker, AEA immediate past president, has pointed out, "schools for children are still the major agencies of education, but they are not the dominate agencies they once were."[29]

These studies of participation in adult and continuing education would indicate that more and more Americans are frequently participating in educational activities. Although participation studies generally include some consideration of why participants said they were attending educational activities, they spend little time identifying the specific characteristics which differentiate these habitual learners from less learning-oriented citizens.

It would be most useful for professions and professional schools to be able to recruit those individuals who could be relied upon to continue their professional education. Cyril O. Houle and several of his doctoral students seem to have done most of the available research on this intriguing topic. Houle's The Inquiring Mind (Madison: The University of Wisconsin Press, 1963) is the classic study in this area. He attempts to probe the nature, the beliefs, and the actions of persons who have been identified as partaking of continuing education activities to an exceptional degree. His major finding seems to be that continuing learners fall into three groups--goal, activity, and learning oriented continuing learners. Various themes emerged from interviews with participants and are discussed at some length--home influences, the influence of libraries and reading; how the person interviewed believes he is viewed by society; and the factors which he believes led him to become a continuing learner.

Subsequent attempts by three of Houle's doctoral students to develop theories and obtain empirical information about types of adult learners are summarized in The Continuing Learner, edited by Daniel

Solomon (Chicago: Center for the Study of Liberal Education for Adults, 1964). Although these papers do not have a very precise bearing on problems of continuing professional education, the paper by Alan M. Brown, "College Experience and Continuing Education Activity," does point out the tencency for alumni of highly-rated colleges to participate in a variety of continuing education activities to a greater degree than those alumni of "average" colleges--a piece of information which, if substantiated, might be worth considering when recruiting members for one's profession.

A fascinating study along similar lines is The Adult's Learning Projects, A Fresh Approach to Theory and Practice in Adult Learning, by Allen Tough (Research in Education Series No.1, The Ontario Institute for Studies in Education, 1971). According to a review by Stanley Grabowski, Director of the ERIC Clearinghouse on Adult Education, Tough's report is a synthesis of several studies conducted over the past seven years dealing with the deliberate learning efforts made by men and women.

> It reports on what and why adults learn, how they learn, what help they obtain, and how much time they spend at learning. From the findings of these studies, the following general picture of adult learning emerges:
>
> Almost everyone undertakes at least one or two major learning efforts a year; the median is eight projects, with some individuals undertaking as many as 20 projects a year.
>
> An average individual spends 700 hours a year at learning projects, but the range varies from zero to 2509 hours of those reported in this study.
>
> Many learning projects are initiated for practical reasons, but some are motivated by curiosity, interest, enjoyment, as well as by credit toward a degree or certificate.
>
> About 70% of all learning projects are planned by the learner himself, with some help from others.

The report encompasses all of the adult's learning projects, regardless of what he is trying to learn, why, how, and where; those in which the learner himself does most of the day-to-day planning as well as classes, conferences, meetings, sensitivity groups, and discussion groups organized by an agency, organization, or club.

A "learning project" is defined as a series of related episodes, adding up to at least seven hours, and in each episode, more than half of the person's total motivation is to gain and retain certain fairly clear knowledge and skill, or to produce some other lasting change in himself . . .

Most adults are motivated by some fairly immediate problem, task, or decision that demands certain knowledge and skill. In relatively few learning projects is the person interested in mastering an entire body of subject matter. Among the wide range of knowledge and skill men and women set out to learn are the following:

Preparing for an occupation and then keeping up.
Specific tasks and problems on the job.
Learning for home and personal responsibilities.
Improving some broad area of competence.
Learning for interest or leisure.
Curiosity or a question about certain subject matter.

. . . The empirical data gathered for this study suggest some practical steps for institutions and instructors;

1. Provide new sorts of help.
2. Help teachers learn.
3. Emphasize the following objectives for students;
   a. Initiate a learning project when facing a major problem, or task, and when experiencing strong puzzlement or curiosity;
   b. Realize that learning projects are common, natural, and useful;
   c. Become more competent at discovering and setting personal life goals and learning goals, and pursuing them from the planning stage through evaluation.
4. Help the instructor feel equal to the students as as a person.
5. Increase the student's choice of how he learns.
6. Increase the student's choice of what he learns.
7. Experiment with group help for self-planned learning.
8. Reduce the emphasis for credit.
9. Student should not rely on a single institution for his education, even within a single year.

> . . . Among his many suggestions for further research, these seem to be the most demanding: more complete picture of why people learn; study the help learners want and need in setting action and learning goals; how to help adults become more competent at choosing a planner for each learning project, and which types of resources are especially common and useful in self planned learning projects.[30]

It would appear that Tough's study is going to be required reading for program designers in continuing education for some time to come.

Motivation

From participation studies and from Tough's report we gain some insight into who studies and how they organize their study. There are relatively few studies within various professions which indicate exactly what motivates professionals to engage in continuing education activities. Continuing Education for R&D Careers contains a number of findings which might apply to other professions to some degree:

> R&D scientists and engineers see continuing education as a complex and dynamic process oriented toward positive goals and functions. Generally speaking, these goals are: 1) Keeping up to date with the state of the art in their own field or fields of work in which they expect to be competent . . . 2) Keeping up to date with allied and adjacent fields which impinge on, or relate to, their own fields of competence or which bear directly on their work. 3) Acquiring whatever knowledge they need in order to continue working in their fields of specialization or assignment; whether this is new knowledge or not is irrelevant to the need for it; pertinence is what matters.[31]

> With reference to employer policy, over one-third of the scientists and one-fourth of the engineers say it has strongly encouraged them in their continuing education. Just under one-fourth of the scientists and over over one-third of the engineers say employer policy has had no effect on their continuing education. The remainder say it has partially influenced them. The men who cite employer policy as positive--either strongly or partially encouraging them--cite specific

> assistances they have received: tuition refunds, opportunities to attend short courses, meetings, and the chance to pursue reading on the job, and the like. They perceive employer policy as having benefits for them but benefits that are not explicit goads so much as instruments facilitating their study and learning objectives.[32]

Joseph T. Sneed has done an economic analysis of continuing education in the professions which points out the economic factors which inhibit participation by professionals. According to Sneed, "the professional who asserts he has no 'time' for continuing education is saying that attendance incurs costs greater than any perceived benefits."[33] The key to increasing participation in continuing education is to make the benefits as immediate and palpable as possible, while decreasing the cost. It is important in this context to remember that beyond the direct cost of attendance are the opportunity costs such as foregone earnings or leisure. One way of reducing the cost of foregone leisure is to locate programs in areas abounding in recreational facilities. Another method of cost reduction is to design the activities to assure that the out-of-pocket costs will be deductible for income tax purposes.

Methods of benefit augmentation are more difficult to manage. It goes without saying that all programs should possess a minimum level of quality and meet a real need of the profession to which they are directed. Beyond that, "What is needed is an educational process that demonstrates to almost all participants that their participation improves both their self-esteem and confidence as well as their income-earning capacity."[34] Although it is relatively easy to plan programs which increase confidence and improve proficiency, it is often very difficult to demonstrate that these programs result in income gains. One way of coping with this problem

is to provide that nonparticipation will result in an income loss. Sneed suggests that medicine has moved ahead of all other fields in the provision of continuing education because it has provided denial of hospital privileges, exclusion from medical societies, loss of speciality certification or licenses, and malpractice suits as possible outcomes of nonparticipation.

> If in fact the prospect of increased income, or the avoidance of an income decline, and strong peer pressure are the elements that will tip the practitioner's cost-benefit analysis toward participation, and it seems highly likely that they do, the problem is simply how this set of circumstances is to be brought about. A very good guess is that it can only be done as a result of intense pressure from within a profession and external pressure in the form of either vulnerability to malpractice claims or legislative or administrative commands that make participation economically expedient.[35]

The two goads of peer pressure and threat of income loss are being institutionalized by various professions in the form of compulsory continuing professional education. Instead of designing programs to take advantage of motivational factors such as personal learning objectives, individual cost-benefit calculations, employer policies or professional pride, some professions are simply declaring that participation should be compulsory in order to maintain certification or licensure.

There are a surprising number of professions already involved in various forms of mandatory continuing education. Judges in New York City must take a two-week training course when they are elected to courts of general jurisdiction. Most school teachers have to enroll in post-graduate courses if they wish to raise their salaries or maintain their credentials. Many employers in businesses demand course enrollment as

a prerequisite to promotion. Mandatory continuing education for the relicensure of nurses is already a law in California. Most state licensing boards for nursing home administrators now require continuing education participation, and the American Institute of CPA's recently approved a resolution recommending that the states adopt a continuing education requirement in order for CPA's to continue to practice public accounting.

Continuing education requirements for various social or citizenship roles are also proliferating. For example, it is common practice to require recipients of welfare to take job training, parents of juvenile deliquents to attend educational sessions at family service agencies, or deliquent drivers to take driver training courses.[36]

This trend toward compulsory continuing education is disturbing to many adult educators since the voluntary nature of participation has long been an established feature of adult and continuing education. There is some sentiment that the idea of "lifelong learning" has become a popular cliche and the concept is growing in power due to social pressure rather than actual need.[37]

One adult educator has suggested that at this rate the citizen of the future will never be able to escape going to school--from the "infant school" at the age of six months to the "geriatric learning center" in which he dies.[38]

As continuing education for professional roles becomes mandatory, one thing is certain--the problems of planning meaningful educational experiences will become much more acute.

> Local or State governmental bodies take it upon themselves to mandate certain course requirements, but the required courses are not always as helpful as they could be in updating knowledge . . . At this moment, because of lack of financial incentives to institutions, it is hard for many parts of our population to find general adult education programs in their own community, no matter how highly motivated they are to continue their personal education or their career.[39]

When continuing education becomes compulsory, then the provision of courses in sufficient quantity and variety is necessary to make the existence of the requirement anything more than a farce. Creating a quantity and variety of courses of any quality is a significant problem for a profession the size of accounting (in which four of the larger associations total over 177,500 members). It would seem to be almost an impossible problem for a small, highly specialized professional area of activity.

Even if quality, quantity, and variety of course offerings is assured, there remains the enormous problem of who is going to administer these requirements. The American Hospital Association has warned that "shortage of funds, understaffing, and lack of competent staff at the present time make it difficult for most licensing boards to do even a fair job on basic licensure."[40] In a survey of state licensing boards for nursing home administrators, AHA found that there was a very uneven application of the relicensure and continuing education sections of the laws.

> Some state boards require that the education courses come from a program offered by a professional association or a college within that state alone. Other state boards approve courses that are submitted to them prior to the time of offering, provided there is sufficient supporting evidence of

> benefit to nursing home personnel. The long-range trend seems to be toward credit courses and away from short courses, inhouse programs, or planned independent study. Formal credited courses are more easily approved by a board but not necessarily more effective.[41]

E. Martin Egelston of the AHA Bureau of Manpower and Education suggests that since improved on-the-job performance is the true objective, proficiency examinations would be far more suitable as a measure of performance than attempting to evaluate records of continuing education participation.[42]

Sponsorship

The studies of participation in continuing education discussed above found that adults turn to a variety of institutions to fill their educational needs. One of the most difficult problems a person encounters in furthering his education is identifying the various institutions offering relevant programs and determining which of these programs are the type in which he is interested. In order to understand more about the place of these continuing education programs within our overall educational system we will examine some of the current sponsors of continuing education.

One way to examine the relationship between the various sponsors of continuing professional education programs is to place them within the analytical system proposed by Paul L. Essert and Ralph B. Spence in their article "Continuous Learning Through the Educative Community: An Exploration of the Family-Educational, the Sequential-Unit, and the Complementary-Functional Systems."[43] Essert and Spence have proposed that the educational activities of a community consist of three basic systems. The family-educational system is primarily important for childhood education, although

it has some influence in the areas of motivation and finance on the ability and inclination of an adult to continue his education.

The sequential-unit system is characterized by gradual steps, graded units, or levels leading toward higher or more complex levels, usually measured in terms of grades or units completed. Elementary and secondary schools, colleges, universities, graduate schools and some miscellaneous schools fall into this system.

The complementary-functional system is primarily concerned with providing systematic learning to

> meet a particular operational problem of life, not learned or inadequately learned in the family or the sequential-unit system. It is complementary therefore, in two respects: it supplies that learning which is required to meet a deficiency of learning in other systems and it adds to or enhances the maturing potential of the learner in ways the other two systems cannot do.[44]

Included in this system are membership educational programs (religious, civic, professional, etc.), community service programs (including university extension), and in-service or on-the-job education.

There are various kinds of over-lap between these systems. For example, the extra-curricular activities of schools and colleges have elements of the complementary-functional system for adults. On the other hand,

> most of the remedial aspects of the complementary-functional system at the adult level, such as evening elementary schools, evening high schools and evening colleges are adaptations of the sequential-unit system to the complementary-functional system.[45]

In an ideal community each of these three systems would operate with full recognition of the nature and function of the others to provide opportunities for anyone to learn whatever he needs to learn, whenever he needs to learn it. It is important that new educational activities be designed to promote the coordination of these three systems in the educative community, not merely to increase the diversity and confusion.

University-based Professional Schools

For individuals interested in continuing professional education the most important institution in the sequential-unit system is the university-based professional school. There are three basic reasons for this importance: 1) the university selects and prepares the professional-to-be, 2) the university controls the process of advanced-degree seeking, and 3) the university is an occasional sponsor of continuing professional education learning experiences.

We have already discussed some of the major criticisms of current trends in professional education. Critics of the professional schools point out that many, if not most, of the university-professional schools do not even pretend to further the cause of continuing education in their professions. Professional leaders charge that the professional schools have failed on three counts: 1) the professional schools do not search out and give preference to "inquiring minds" or potential "continuous learners" in selecting entrants into the professions; 2) the schools generally do not successfully inspire the professional-to-be with a thirst for life-long learning nor equip him with the intellectual skills to pursue his continuing professional education; and 3) most professional schools do

not take any responsibility for providing a consistent program of continuing professional education, even for their alumni.

In defense of the professional schools it can be said that identifying "inquiring minds" and inspiring a thirst for life-long learning are two very complex tasks--which even educational experts do not fully understand. But why do the professional schools avoid creating continuing education programs for their professions? This is a topic on which there is much speculation, most of which revolves around the inhospitable nature of the university environment.

The reason most often given for the absence of continuing education program planning in the university is a general lack of financial support. For example, in a study of the continuing engineering education programs of twenty-four universities, the twelve found to be "inactive" cited limited financial resources as a primary reason for their lack of participation.[46] This finding is typical of many professional schools, which argue that they must continue to allocate their scarce resources to the performance of their traditional tasks. In the opinion of Joseph T. Sneed, the professional schools simply do not perceive that there is either 1) a substantial unfilled demand for continuing education or 2) a reasonably certain source of funds to defray the costs of such increased responsibilities.

Sneed's economic analysis of the prospects for development of university-based continuing education in the professions concluded that:

> Only a very substantial increase in the demands for continuing education and the appearance of sources of funds sufficiently ample to eliminate the risk of dilution of traditional academic functions will

> do the job. At that point, and only at that point, universities will be confronted squarely with the problem of their responsibilities to continuing education unencumbered by concerns for the neglect of their traditional responsibilities.[47]

He feels that it is the responsibility of the professions to demonstrate the already existing demand for continuing professional education and to take further steps to increase it. The university professional schools will then have no excuse for not confronting their continuing education responsibilities.

That a lack of financial resources is a serious problem in undertaking a program of continuing education seems to be contradicted by the experience of university extension divisions. Milton Stern points out that there has actually been a "milk-cow" tradition in higher continuing education.[48] In public institutions extension programs are exptected to provide a high level of self-support, and in private institutions they are asked frequently to show significant surpluses over direct costs. In an informal survey Stern found that although some attempt is reported by some universities to maintain lower fees for non-credit courses, especially in the humanities, courses clearly geared to job improvement and professional advancement are usually offered at the maximum rate "the traffic will bear."

One unfortunate effect that this pressure to make money or at least to break even has had on program planning has been to inhibit attempts to expand informal and liberal education programs for adults in favor of courses planned to attract large audiences.[49]

It seems that although university sources of support may be

grudging, tuition income can often provide adequate financing--especially since the cost to the individual is often underwritten in part or completely by the employer.

It would seem that the underlying reason universities avoid involvement in continuing education is that university faculty and administration generally do not view continuing education as a legitimate preoccupation of the university. It has been suggested that this is because university adult education "was born at a poor time when the parent institutions were too rigid to accept it."[50] It is ironic to note that an examination of the university as an emerging institution in the 11th to 15th centuries points up the fact "that at its beginning, the university was primarily an action program in adult and continuing education, the first students being mature people in search of knowledge to develop solutions to social problems."[51] What happened in the intervening centuries to change the university's view of the education of adults is an interesting problem for historians of higher education.

For whatever historical reasons higher adult education today has become a separate but not equal part of most universities. It is regarded by many as a marginal enterprise, not related to what most universities see as their major role. According to some faculty members, "the education of adults is a necessary hindrance and results in running a class "A" division days and a class "B" division at night."[52] As a result, "Many day college deans and faculties look with jaundiced eyes upon any project which would take the institution out of its customary role of providing education opportunities for a select few within certain age groups."[53]

Although much has been written about the low regard for adult education activities, little hard fact is known. One of the few available studies of this phenomenon is an investigation of faculty perceptions of continuing education at Syracuse University. Although this study was limited to sampling faculty opinions of the University College, the Syracuse continuing education unit, it points out several reasons for the poor image of higher adult education generally.

One barrier to more complete acceptance of continuing education by the faculty at Syracuse is "the persistence of the notion that continuing education's most important goal is public relations for the parent institution."[54] Another barrier is the conception of adult education generally as primarily remedial or avocational, which led faculty "outside the field to believe that education for adults even at universities was a superficial process."[55] This view is perpetuated by some universities which continue to engage in this type of programming. In addition, many faculty members still underestimate the ability of adults to learn.

> Despite numerous investigations proving the adult's learning ability is at least equal to his youthful counterpart, the feeling exists that the adult is not as capable. Some instructors consequently water down subject matter in their adult credit courses, resulting in less than adequate achievement. Then, when comparisons of achievement are examined, the adult may end up at the unfavorable side compared to younger students.[56]

University faculty members tend not to be impressed with the opportunities which continuing education programs offer to deal with the needs of contemporary society. This is not surprising since community service generally has not been a major objective of university programs.

> Where faculty have not been overtly hostile, they tend en masse to be indifferent . . . In their attitudes toward community problems, most scholars, even in the social and behavioral science, are like most physicians these days--they don't make house calls . . . [57]

Milton Stern attributes this hostility or indifference to public service programming to the inability of the faculty to recognize that there is any inherent value in programming which demands rapid adaptability to the changing social scene. Its volatility is too great a contrast to the relatively more permanent aspects of graduate and undergraduate curricula. The emphasis within the university has been to identify and teach the "core" of the disciplines and the professions. Since "the university tends to see itself as sub specie aeternitatis,"[58] it simply does not cope willingly with subject matter in which there is rapid change.

Stern suggests that administrators who are seeking to develop organizational means to meet the university's social responsibilities give first priority to a program of continuing education for university faculties!

It is interesting to note that the Syracuse study of faculty attitudes toward continuing education found that faculty members in the professional schools held a significantly higher opinion of the excellence of continuing education programs, purposes, and instruction. The author attributes this favorable attitude to the "pragmatic orientation" of the professional schools.

> By the nature of the purposes of Professional Schools, which is to prepare people for specific positions or vocations, it may well be that continuing education (which is pragmatically based) would receive greater support from individuals with similar orientation.[59]

Negative attitudes of faculty members are reinforced by the current system of rewards in academic circles. It has been reported frequently that there is a nearly universal absence of rewards and incentives for faculty members devoting time to continuing education. It is traditional for faculty members to be paid less money for teaching the same course in the evening than they receive in the daytime.[60] This evening work also tends to take valuable time away from research activities and to infringe on leisure pursuits. Since the major rewards of promotion and status are dependent upon teaching in degree-granting programs and publishing research studies, it is understandable that it is difficult for faculty members to develop a more positive attitude toward participating in continuing education.

The current structural pattern of the university also contributes to the low status of continuing education within the university community. Until recently most efforts in continuing education have been conducted haphazardly through extension and various ad hoc agencies. According to Milton R. Stern:

> The great issue of the seventies for the universities is how to organize themselves, in cooperation with other social institutions, to deal with the imperative demands of contemporary society . . . The fact is that a comtemporary structural model for the interests represented by the rubrics of continuing education and community development has not yet been successfully established. American higher education allegedly pragmatic to its bones, has not developed a workable institutional arrangement.[61]

In order to gain a greater degree of acceptance within the structural pattern of the university,

> . . . some deans and directors of adult education react defensively by taking steps to reduce the gap. This is usually accomplished by duplicating the activities of the parent institution. Experimentation, innovation, and revolutionary goals are thus abandoned in favor of more conventional patterns to gain respectability and status. Gaining acceptance usually means returning to, or concentrating on, rigid credit programs which tend to be prized and considered the basis of quality or sound standards.[62]

The most successful continuing education programs have been undertaken where administrative attitudes have been more flexible and permissive, if not exactly supportive.[63] In most cases this tolerance has been due to the peripherality of the continuing education programs, but it has meant a greater freedom for innovation and experimentation than is generally permitted in the more traditionally accepted or more highly structured divisions of the university. As a result of innovation and experimentation, extension divisions have almost ceased to be part of the sequential-unit system, and have become the backbone of the complementary-functional educational system.

In 1969-70, when the "student revolt" in the universities errupted, terms used by students to describe the universities typically included "irrelevant courses," "stagnant faculty," "meaningless grades," "phony degrees," and "anemic curricula." At a meeting of the National Association of State Universities and Land Grant Colleges in 1971, Phillip E. Frandson of the University Extension Division of UCLA, pointed out that universities whose programs were under attack might consider copying many of the successful practices of their extension divisions.

Frandson argued that emulating the methods of their extension

divisions would change most universities in the following ways: 1) the role of the student would be more active (student would decide when, how, and what he would study), 2) the role of the faculty would be altered (must be better equipped to assist methodologically in the learning process, be part of a learning team, rate courses on the basis of the number of students voluntarily enrolling), 3) there would be greater involvement in the planning of curriculum and courses of non-university professionals--those already engaged in careers in the field for which the enrolling students are seeking knowledge, 4) the "tyranny of grades" would end; other goals for study, liberated forms of degrees, and certificates would be developed, 5) the emphasis on "research and specialization" in the under-graduate program would decrease, 6) more media/communications technology would be utilized, 7) more opportunities for lower economic and educational groups to have more education would be provided, 8) more problem-solving, community development, and public service activities would be undertaken, and () most students in the future would become "part-time."[64]

As for the future of Extension Divisions themselves, Milton Stern has predicted that: 1) within the next twenty years or so, the Extension Divisions will turn over to the established units of the university the part-time credit, extended university, and open-university activities; 2) continuing professional education will continue to expand its development as a major line of Extension work; 3) there will be an expansion of general cultural education; and 4) compulsory adult education will develop and expand. In the future, Stern feels that the whole

university will be involved in creating post-professional, post-degree continuing education for mature men and women--resuming an activity which has its roots in the origin of the university.[65]

Some such changes in universities already account for the development of several innovative programs of professional continuing education. For example, the University of Southern California has developed the Intensive Semester format (for public administration courses) which provides an opportunity for study without long periods away from the job.

> Students enrolling in these courses are required to do six weeks of studying and reading in advance. Books, periodicals and other reading materials are sent to the student. These constitute the course reading and complete coverage of the reading is expected before the student comes to class. Classes are then held for a solid week. From one Saturday morning through the next Saturday night at least 40 hours of classwork is scheduled. Sessions are held mornings, afternoons and some evenings. During the first meeting of the class, an examination is given covering the reading assignments which were completed prior to coming to the campus. Students who do not pass this test lose their place in the class and "fail" the course. At the end of the intensive week students are assigned a term paper or research project which must be completed within six weeks of the end of classroom work. A final class convening is held at the end of that time for discussion of papers and final evaluation of course accomplishments. This session usually runs about ten hours.[66]

A somewhat similar program for "mid-career" education is the Oklahoma Advanced Plan, designed to fill the needs of military or civil service personnel stationed anywhere in the world. All requirements for degrees can be filled through 1) one week Intensive Study Sessions (either at the Norman Campus or anywhere around the world), 2) Directed Readings, and 3) a Research Paper. Norman campus degrees such as the

MA in Public Administration, MA in Economics, MBA, and MA in Education can be obtained in this fashion.[67]

Finally, the University Without Walls concept may have a great affect on the form of continuing professional education in the future. In a summary of the implications of the "open university"/"external degree" projects underway in this country, John J. DeRolf calls it "an idea whose time has come."[68]

> The significance for those in continuing education-extension of this major development in higher education is vast. The open university concept could be the culmination of nearly all our off-campus credit activities. It incorporates much of the service function of the university and has captured the imagination of the many who see a change in current university structure as imperative.[69]

This concept deserves a great deal more study to determine its usefulness as a delivery mechanism for continuing professional education.

One way in which some university-based professional schools have been involved in continuing professional education programming is through cooperative efforts between the university and another sponsoring institution. This is particularly true in the field of engineering where there are many examples of collaboration between the university-based professional schools and the employing corporation. In the study Continuing Education for R&D Careers, surveyors found that there were certain prerequisites required by the professional schools before they agreed to collaboration.

> In general, universities regard four conditions as essential to developing collaborative continuing education efforts with employers.

These are:

1) Adequate financing, generally by the employer, but possibly also from tuition, foundations, and government agencies.
2) Academic merit, involving a learning experience which faculty regard as worthwhile for the student and which results in benefits to his employer through his increased competence on the job.
3) Mutual benefit to the faculty by being an experience consistent with their image as educators, by providing them with a worthwhile experience; they must also have the freedom to prepare and present themselves and their material in a way consistent with their standards and values.
4) Adequate staffing with persons who, in the opinion of the university faculty, are qualified to teach continuing education courses, but these people need not all be university-connected people providing credit is not involved.[70]

Major difficulties in developing collaborative programs reportedly occur because of differences in point of view over selecting students and because the kinds, quality, and intensity of continuing education efforts are not agreed upon. Both "active" and "inactive" schools reported that they had experienced considerable frustration and disappointment in past experience with off-campus teaching, both credit and non-credit. Probably as a result, most currently reported collaborative programs seem to pertain to traditional degree-seeking activities in which mutual understanding is usually experienced because both sides have the same expectations of these programs. Non-degree continuing education activities seem to be limited to on-campus, non-credit programs which avoid the issues of credits and standards.[71]

Despite these barriers to initiating collaborative programs, this form of cooperation between the sequential-unit system and the complementary-functional educational system would seem to have great

potential. Examples of collaboration between professional associations and university professional schools are appearing. For example, the American Society of Association Executives has been cooperating with Florida Atlantic University since 1969 on a graduate degree program for Association Executives. The program involves various forms of organized study over a three-year period without requiring the association executive to be away from his office for more than two weeks at a time.[72] This type of cooperation has the advantage of requiring less adaptation of the requirements of the university to meet the needs of the profession. It should be explored more fully.

Community Colleges

Although the university-professional school has been, and will probably remain, the single most important institution for professional education, the rapidly expanding community colleges are challenging the university's overall dominance of the post-secondary educational scene. Community colleges every year are enrolling increasing numbers of freshman and sophomore credit students. Evening undergraduate extension programs are steadily losing students to community colleges, and some experts are suggesting that the community college is the most fertile field for the development of continuing education of all kinds.

The development of community colleges in the United States is just part of a world-wide movement toward new forms of education beyond the secondary level. In 1971, the OECD reported that it had received information on the development in some thirty-eight countries of postsecondary, tertiary, short-cycle or recurrent educational programs.

As these various institutions find their place within the communities, their relationship to pre-existing institutions must be clarified. As one expert points out, "there are choices to be made:"

> 1) Will the college be primarily a stage in the process of higher education?
> 2) Will the college be a clear alternative (to the university) with its own continuing education?
> 3) Will the college focus its attention on the community or region, becoming part of a system of tertiary education with such other elements as university, industry, school boards, museums, libraries, and broadcasting?
> 4) Will the college become the chief insitution for the preparation and continuing education of the paraprofessional plus some general education?
> 5) Will the college become the major institution for higher vocational education of all kinds, including the professional schools?[73]

In the United States community colleges have always had a "cafeteria" approach to course development, based on perceptions of community need and support for various subject areas. Now they are recognizing the importance of community-service vocational courses and integrating these into their total course offerings. In addition, many colleges are changing the structure of their organization to facilitate the enrollment of part-time working students. An excellent example of this new approach to continuing education are the community colleges of British Columbia, where continuing education is seen as one-third of the total program.

The first of the British Columbia colleges was Selkirk College, opened in 1966. According to reports, Selkirk College has integrated continuing education into its total program--there is no separate program for adults. There is also no separate budget provided for continuing

education. Each department includes continuing education expenses in its regular budgetary request, with continuing education given equal status in regard to availability of funds. There is a director of continuing education who has surveyed the community to determine areas of need. He assists each faculty member to develop his own program of continuing education. It is specified that participation in continuing education is one means of judging a faculty member's readiness for promotion. To facilitate attendance by all members of the community, the normal school day runs from 8:30 am to 10 pm.[74]

Although there is currently a tendency for colleges and university extension divisions to attempt to establish parallel and competitive programs, some adult educators believe that the need for continuing professional education is sufficiently great for a successful partnership to be created. Jean M. Arnold and Max Robert Otte point out that "joint planning and cooperative offerings of courses should provide a more secure foundation for the future of continuing education programs."

> Community colleges and universities can help each other considerably when their respective strengths and distinctive characteristics are viewed as complementary rather than competitive. The areas of uniqueness as identified in the literature include:
>
> Community Colleges
> 1. Accessibility for community residents
> 2. Knowledge of community needs
> 3. Teaching orientation
> 4. Preparer of para-professionals
> 5. Community services--a major purpose and function
>
> Universities
> 1. Well-structured and staffed extension divisions
> 2. Accessibility to theory builders
> 3. Subject matter competence
> 4. Preparer of professionals
> 5. Continuing education expertise[75]

Otte and Arnold feel that organizations of adult educators from local institutions should be created to promote systematic planning so that each respective community college or university offers those programs which they are most capable of developing, staffing, supporting, and sustaining. If such local groups of adult educators could be formed, it would be extremely desirable to include as well continuing education personnel representing various agencies in the complementary-functional system. The creation of such local councils of adult educators would be a major step in the achievement of the educative community.

Proprietary Schools

In an intermediate position, between the sequential-unit and complementary-functional systems, are the proprietary schools. These profit-making enterprises are often similar in structure to the institutions in the sequential-unit system, but their function in the community is to fill needs for vocational training not met by the non-profit public and private colleges and universities. For some vocations these schools are the only source of training; for others, they provide a concise job-oriented vocational training free from the general educational and cultural course requirements usually attached to a college degree.

The survival and success of a proprietary school depends on its flexibility. As a profit-making enterprise it must have an acute sensitivity to the needs of adults for a variety of training opportunities, and the ability to respond to these needs as soon as they are identified. According to recent accounts, proprietary schools are currently being

"chartered by the dozens,"[76] however, the few statistics available are conflicting and difficult to interpret. The major work on the subject, Classrooms on Main Street by H.F. Clark and H.S. Sloan (New York: Columbia University, 1966), provides an interesting description of their programs.

Corporations

Of perhaps more significance for professional-level practitioners are a group of corporate giants which have moved into the educational market place in the last decade. They are providing distinctly complementary-functional services in "manufacturing educational materials and equipment, managing adult education programs, conducting research and providing direct instruction to adults."[77] Among the active organizations listed by various authors are: Xerox, Time, General Electric, IBM, Raytheon, RCA, CBS, Minnesota Mining and Manufacturing, Litton, Lear-Sigler, Westinghouse, Crowell-Collier-Macmillan, LTV Aerospace, ITT, and others--"with the financial resources to make the total budget of the University of California seem small by comparison."[78] Unlike the universities, these corporations seem to be convinced that there is a continuing education market of considerable size and profitability.

Business and Industry

In the complementary-functional educational system, business and industry play a major role. For many professionals working independently or as employees of small organizations, involvement in continuing education continues to be a personal matter, but professionals in larger organizations are being provided an increasing variety of opportunities by their employers. In the late 1950's and the early 1960's it was

actually common for employers to recruit professionals, particularly engineers, by offering a variety of fringe benefits, with particular emphasis on continuing education.[79]

Some experts have suggested that business and industry are probably the largest single source of continuing education and training in our society. Unfortunately, there are no reliable estimates of programs, enrollments, or industry outlays to prove this point. Statistics on continuing education in business and industry are almost impossible to find and the validity of those available has been questioned. Apparently there is no central source of such information. No governmental agency attempts to collect statistics on continuing education in business and industry, many companies have not been anxious to publicize their own statistics, and independent sources of statistical information seem equally unavailable. After attempting to locate data for his study of adult education in the United States, A.A. Liveright concluded:

> Investigations made in connection with this study provided added evidence that no statistics are collected by nongovernmental organizations. The U.S. Chamber of Commerce, the American Management Association, the National Industrial Conference Board, and similar organizations were requested to furnish data. No comprehensive studies or data were available.[80]

The collection of such statistics would be a difficult, if not impossible, task for any agency. One problem is the lack of definition of terms--not all those engaged in training activities would be aware, or would agree, that they are functioning in the field of continuing education. Another difficulty arises from the fact that some activities, such as on-the-job training, do not readily lend themselves to data

gathering.[81] Finally, many companies apparently keep few records of any of the educational activities of their employees, even of participation in employer-sponsored programs.

The primary source of information on training and continuing education in business and industry is a book by H.F. Clark and H.S. Sloan Classrooms in the Factories (New York, Farleigh Dickinson University, Institute of Research, 1958). The findings of Clark and Sloan were summarized by A.A. Liveright as the best available picture of the situation.

In general, Clark and Sloan found that most large industrial corporations and retail establishments carried on educational activities but that such programs diminished as establishments became smaller.

> They report that of the 582 largest corporations: Between 61.4 and 89.0 per cent offer educational activities of some kind. Between 41.0 and 70.5 per cent offer programs within the jurisdiction of the corporation and outside, and between 17.4 and 46.8 per cent offer these activities only within the jurisdiction of the corporation. Between 58.4 and 100 per cent offer some kind of educational opportunity. Between 58.5 and 87.9 per cent use their own personnel as part-or full-time teachers, while between 29.0 and 58.9 per cent employ college professors or other outside specialists. In retailing, they report: of 36 of the largest retail establishments reporting, only 3 reported no educational activities.[82]

A more recent estimate of activitiy made by Paul Sheats concludes:

> The growth of company schools (with a projected increase from 7.2 million participants in 1965 to 17.5 million in 1974) suggests that business and industry consider adult eduation a sound investment.[83]

Training in business and industry has focused basically on two groups. Employees are the primary target, although with the rapid advance

of technology, training programs have expanded to serve the customers and client systems of the business or industrial organization. Furthermore, since 1960, "there has been a growing trend for business and industry to become involved in the social scene, and we now see companies engaged in training persons who are neither employees nor customers."[84]

There are many possible modes of continuing education which an employer can utilize in programs for employees. In considering large research and development laboratories, investigators identified basically six different modes which are probably typical of most industrial situations.

> Employer programs of continuing education consist essentially of various combinations of six different modes of continuing education. On the whole, most managements make use of three modes: university credit courses for which tuition is refunded; attendance at professional meetings for which expenses are paid (and time off is given); and regular series of in-lab lectures and seminars. There is greater variation from laboratory to laboratory in sponsorship of the other three modes: in-lab, non-credit courses taught by laboratory personnel; outside short intensive courses; and sabbatical leaves with pay. There is also a library in each of the 17 laboratories which is an important resource both in its housing of the literature and in its provision of services to researchers.[85]

In addition to these six employer-sponsored modes of continuing education, there are three self-teaching modes which are largely controlled by employer policy. These include: reading the scientific and technical literature, participating in grass roots seminars, and teaching.

Two large companies with notable continuing education programs for their employees are Eastman Kodak Company and Westinghouse Electric Company.

> . . . Westinghouse Electric Corporation offers support for graduate study for its employees in ten different geographical areas of the United States and in conjunction with more than 25 universities. Two of the major programs are the Graduate Study Program, which leads to a master's degree or a doctorate in a variety of fields, and the Business and Management Program, which is a certificate program rather than a degree program. These programs were initiated in 1927, and by 1969, 1,401 employees participating in the Graduate Study Program had received advanced degrees in a wide variety of fields.
>
> . . . the Eastman Kodak Company has been providing such a refund program for out-of-house education programs since 1916. In the academic year 1967-69 the company provided tuition refunds to 4,300 employees. An employee at Eastman Kodak can also receive an academic assignment for advanced study--that is, the employee can enroll in a formal program of 12 months of study at a recognized institution and remain on full salary.[86]

There are two major problems in the system of providing continuing professional education through the business or industrial employer--1) a lack of systematic organization and 2) a lack of rational methods of allocating opportunity. Continuing Education for R&D Careers points out that even employers who actively encourage continuing education participation do so in a very erratic manner.

> . . . the modes of continuing education are not highly structured . . . Even employer-sponsored programs of in-lab, non-credit courses are not highly structured--standards of student performance are not uniformly applied, usually anyone may register, and there is little or no integration or coordination of these courses so as to systematically cover some area of knowledge or to achieve some specific updating goal. With university credit courses and outside, short intensive courses, the course itself is highly structured and organized, but the process by which the individual selects and undertakes

> one or the other is less than orderly, often unplanned, and at times slipshod. Concomitantly, most laboratories have either no, or markedly inadequate, records of continuing education among their employees--employer-sponsored modes fare little better than personally-organized and self-teaching modes. Further, most laboratories have no consistent budgeting or coordination of their continuing education and none, in the study sample, systematically evaluates the results, either short-term or long-range.[87]

The second basic problem in the provision of continuing education is that the employer decides which employees participate and which activities are selected. Employers naturally tend to think of continuing professional education in terms of 1) cost and 2) participation in activities which will directly benefit the organization. Unfortunately, since it is difficult to demonstrate that preventing individual obsolescence or pursuing some broad educational objective is of direct benefit to the employer, these activities are frequently assumed to be most profitable to the individual. This assumption influences the pattern of allocation of opportunities.

> Hence, there is a strong underlying assumption that continuing education activities sponsored by employers are really rewards (even if sometimes given in advance like a "Go Now-Pay Later" travel plan). It then comes out, as so often with rewards in this world, that those who gather in most of them are least in need. But management cannot see (very often) the point of sending a shy and non-verbal young engineer off to the heady socializing of a national convention at company expense.[88]

One of the most important ways in which an employer can encourage participation in all the modes of continuing education is to structure

the job and the work environment so that the individual has the time to keep himself up to date, or to catch up if necessary.

> The literature contains various proposals for devoting one day a week to keeping up to date, or five hours or 5 per cent of the work week. None of these appear to have received widespread acceptance, probably because no one of them fits the majority of established work schedules. If keeping up to date, or catching up, were simply a matter of self-teaching through reading, perhaps some specific number of hours would be a reasonable proposal but some modes of continuing education require varying sized blocks of time. Also, as the magnitude of technological change becomes greater, the individual is less and less able to keep up to date solely on his own time. Consequently, many writers on continuing education are calling for a rethinking of the job format to include time to keep up to date, not only in the speciality of the job assignment but in broader areas where new developments pertain to the spectrum of the incumbent's original training and present interests.[89]

Despite current problems, there is little doubt that provision of continuing professional education by the employer is a very important source of training and education in the community. In fact, it may be possible that some employers will eventually challenge the exclusive responsibility of the university in the field of graduate education.

> A strong case has been made for giving the National Federal Laboratories the power and responsibility for granting advanced research degrees. Arguments in favor of extending the laboratories' mandate to include graduate school are convincing and deserve further exploration. The national laboratories already possess the manpower, research facilities, research tasks, an academic atmosphere, and the funding. Most of them have in-house education programs, fellowships and internships. They are also among the greatest users of research graduates. With research and demands for an adequate research staff

> presenting a large portion of the cost of graduate education, it is entirely possible that in some areas it may be more efficient to conduct graduate education as an adjunct of a large-scale research institution, than it would to consider research an adjunct of the educational institution.[90]

Unions

Unions are actively engaged in continuing education for their members. Their activities fall into two basic areas: 1) apprenticeship training and 2) labor education. According to one source, the craft unions dominate apprentice training, although this process is regulated by states and by the Federal Bureau of Apprenticeships, a large bureau with representatives in all major cities. "Apprentice training involves on-the-job training, plus classroom instruction, which is so often offered in public night schools with federal subsidies from Vocational Education."[91]

Labor education attempts to meet workers' educational needs and interests as they arise from participation in unions.

> Almost all labor education is directed toward those unionists who are active in their organizations, either as volunteers, or as paid staff. The major emphasis is on local union activities. These include local officers, members of bargaining comittees, stewards who have the responsibility for contract enforcement at the work site, and members of other committees, such as those concerned with politics, legislation or community affairs . . . Since most labor education is directed toward increasing the students' competence to function in the union, many courses deal with such problems as collective bargaining, union administration, communications, trade union history and structure and politics and legislative issues.[92]

Considerable labor education is conducted directly by the unions themselves, without the assistance of other educational institutions.

There are, however, twenty-seven formally established university labor education centers in the United States. These use forms common to all adult continuing education--short intensive conferences, residential schools (mostly for one week), and evening courses (most of which run seven to ten sessions but some for a full semester or academic year). Each conference or course generally has a specific function which is completed when the program is over, however a few centers in recent years have sponsored long-term evening programs consisting of a series of courses.[93] There is very little correspondence education. Two of the labor education centers have special purposes. Brookings Institute conducts special conferences for elected national union officials and Harvard University runs a 13-week resident training program for union staff.[94]

According to one expert,

> . . . labor education remains peripheral to the adult education movement in the United States. Very few unions take it seriously enough to invest sufficient funds for a meaningful program . . . Unless there is a major breakthrough in scale, based on a massive infusion of union or public funds, or both, the present situation will continue. In some unions, and for some unionists, labor education will be meaningful. But for the total union movement and for the nation, labor education will represent an indication of what might be done rather than a major accomplishment.[95]

Federal Government

The extent of the federal government programs of continuing education for adults is almost impossible to measure. These activities fall roughly into five areas: 1) funding manpower training projects (primarily for the poor), 2) funding vocational education programs (for young people and adults), 3) training federal employees, 4) training servicemen, and 5) conducting basic research on adult learning and personnel development.

State and local governments also train their employees, and finance adult education programs through the public schools. There is, however, no systematic reporting of activites on the state and local level--these efforts will not be explored here.

The federal government's manpower training and vocational education activities are apparently administered by their respective divisions of the Office of Education's Bureau of Adult, Vocational, and Library Programs. During the 1960's the federal government reportedly spent about $12 billion on manpower training, "in a variety of innovative programs aimed mainly at moving the poor into the labor force."[96] By 1969, various federally-funded vocational education programs enrolled some eight million students--at a cost of $1.4. The allocation of vocational education funds is roughly: home economics ($181 million), office occupations ($217 million), trades and industry ($318 million), agriculture ($118 million), and other ($535 million).[97] These programs are of interest here primarily as indications of the magnitude of the government's involvement in the complementary-functional system, not as sources of continuing education for

professionals.

More relevant to the needs of professional practitioners are the government's training programs for its own employees. In the past, this training tended to be limited to the operation of agency procedures, policies, or equipment. With the tremendous expansion of the federal government in the 1930's and 1940's, followed by the recognition of growing technological obsolescence in the 1950's, the need for expanded continuing education of government employees became increasingly apparent.

In 1958, Congress passed Public Law 85-507, the Government Employees Training Act (GETA).

> . . . the Act provided for a broad, rapidly developing activity in which all federal agencies can participate . . . Its objective was to improve efficiency and keep employees abreast of scientific and management developments. Essential training may be done within government and non-governmental institutions. Basic-skills education is not authorized unless qualified persons cannot be found for specific jobs.[98]

Under GETA the Civil Service Commission acts as the central unit for federal training.

> The Commission's role under the Act is both regulatory and operational. It issues regulations for and evaluates the agency training activities and it gives agencies professional advice. In addition, it directly conducts courses for the agencies.[99]

There are other agencies which conduct training outside GETA, including the Tennessee Valley Authority, the Atomic Energy Commission, and the Central Intelligence Agency.[100] By 1969, it was estimated that the federal government was spending through all these agencies about $104 million annually to train about 1.1 million of its employees.[101]

Much of this educational activity takes place at the numerous study centers for federal employees sponsored by various agencies. These centers are generally cooperative arrangements between the agencies and educational institutions. They provide opportunities for employees to study at an agency's own facilities.

> Besides providing classroom facilities, agencies may furnish conference rooms, audiovisual aids, and training equipment. Approximately 130 government off-campus study centers in cooperation with over 60 universities and colleges serve more than 25,000 students. Generally, training offered at these centers is at the graduate level, is career related, and can lead to advanced degrees. Acceptance into the program usually is based on the academic requirements of the university under whose direction the off-campus center operates. Payment of tuition and other related expenses by the federal government is dependent of the relevance of the training to the individual's work assignment. Depending on such factors as availability of instructors and classrooms, workload, and nature of the course, off-campus courses are taught off or on employer time. Virtually all aspects of technological studies in science, engineering, administration, and management are covered in these programs.[102]

Among the off-campus study programs are the National Bureau of Standards Graduate School, the Atomic Energy Commission Center for Graduate Study, the General Services Administration Study Center, the Joint Institute of Laboratory Astrophysics, and centers in most of the National Laboratories.[103]

One of the most remarkable of these study centers is the U.S. Department of Agriculture Graduate School. The school was originally established in 1921 to train scientific workers for the USDA. It now has an enrollment of 21,000 students--more than the combined undergraduate

enrollments of the District of Columbia's major universities, including Federal City College. Most students are federal employees or their wives, but any "qualified" person is eligible to enroll--the most important criteria for admission is motivation.

The USDA school receives no federal funds--it subsists entirely on the $22 per credit hour tuition fee. No degrees are awarded, but students who complete a prescribed curriculum receive certificates of accomplishment. Some 750 part-time teachers offer around 500 courses, ranging from business management to Swahili. There is no campus--courses are offered in USDA facilities at night and on Saturdays, with additional facilities being donated by other federal agencies. The program is characterized by self-directed study, individualized instruction, programmed learning materials, education growing out of the interest and experience of the student, setting of individual goals and objectives, and advancement at one's own rate of speed.[104]

To supplement these agency-sponsored training programs the Civil Service Commission offers a number of interagency training opportunities for all professionals. The Commission's programs

> . . . include management training for mid-career and senior professionals; science and public policy seminars; and specialized courses in such fields as automatic data processing, management sciences, systems analysis, and financial management.[105]

The Commission also operates executive seminar centers in Kings Point, New York, and Berkeley, California, where middle-level executives live on campus for a two-to-four week period.[106] Executives can also attend the Federal

Executive Institue, established in May, 1968.

> The Institute's program is an extensive eight-week in-government and government-wide developmental experience. The basic curriculum is concerned with adaptations of governmental structures to new functions, national goals and programs, and innovation of administrative strategies. The class size is set at 30 students. Plans call for two concurrent classes in each session, or 12 classes per year. The director of the institute determines the composition of each class with the objective of ensuring balanced representation based on federal programs, levels of responsibilities, organizational roles and professions of the participants, and other relevant characteristics.[107]

A second major source of continuing professional education for government employees is the Department of Defense. By any standard, this agency conducts one of the world's largest continuing education programs.[108] In 1969, the Department of Defense provided training for approximately 800,000 military personnel and 25,000 civilians. The Army alone provided technical non-combat training of from six weeks to over a year for 38,000 Army personnel in 1971.[109]

> Of the more than 3 million military personnel employed in the Department of Defense, almost one out of every ten is in a formal training environment at any one time.[110]

Detailed accounts of these educational activities appear in Classrooms in the Military by Harold F. Clark and Harold S. Sloan (New York, Teachers College, Columbia University, 1964) and Education in the Armed Forces by James C. Shelburne and Kenneth J. Groves (New York: The Center for Applied Research in Education, 1965).

There is a variety of types of training given to servicemen.

> Skill training is provided to meet the needs of 1500 occupational specialities. Half of the enlisted men receive training in technical skills, the majority in the maintenance and repair of electronic, electrical and mechanical equipment. About 33 percent are trained in supply and administrative occupations and about 5 percent in medical and dental specialities. Only 12 percent receive training in skills directly associated with the firing of weapons.
>
> More than 300 Army schools exist throughout the United States. Clark and Sloan identified over 4000 separate residence courses. Additionally, training is provided in hospitals and through correspondence centers.[111]

In addition, the military also operates four accredited colleges: Army's West Point, Navy's Annapolis, the Air Force Academy in Colorado, the Merchant Marine's King's Point.[112]

Knowledge of almost any subject can be required for some military positions, from oceanography, economics, and international relations, to various languages. As many as 2800 officers may be selected to pursue these topics in the academic programs of civilian institutions, while about 1700 students study at in-house graduate insitutions such as the Naval Postgraduate School or the Air Force Institute of Technology.[113]

Officers require additional training in administrative and leadership skills as they advance in rank. For this purpose the Armed Forces provides a remarkable series of educational experiences.

> Approximately 27,000 officers attend basic courses each year to learn about exercising the role of leadership and the technical fundamentals related to their assignment. About 8800 of the more experienced are selected to attend an advanced

> program at branch schools to prepare for duties at higher levels. The pyramid begins to narrow and approximately 3100 officers with approximately 10 to 15 years of service attend courses which prepare them for command and staff positions. Finally, the most promising officers (approximately 950) are selected for senior colleges (i.e., the Army War College, the School of Naval Warfare, the Air War College, the National War College and the Industrial College of the Armed Forces).[114]

In addition to these educational activities, there are many off-duty educational opportunities for servicemen. These include the provision of tuition assistance for courses at civilian institutions (reimbursement up to 75 percent of cost), educational benefits available through Public Law 89-358, on-base continuing education classes, and correspondence courses.

Correspondence courses in academic subjects are available to all members of the military service from the United States Armed Forces Institute (USAFI), established in 1942. USAFI currently offers about two hundred courses (approximately half at college level) with over 300,000 enrollments yearly. In addition, the Armed Forces has contracts with about fifty colleges and universities to provide some 6000 correspondence courses to servicemen. The USAFI is very active in developing testing procedures which will give accurate indications of the student's achievement in a subject, regardless of which course or textbook he has used. These tests are developed for USAFI by universities or testing services on the basis of USAFI specifications and the contents of the commonly used textbooks. A rigorous developmental procedure includes

the use of new tests in civilian schools to permit the establishment of norms, and submission of the tests to the American Council of Education for determination of a passing score and recommended course credit.[115]

The Armed Forces employ a number of educational officers and counselors to direct their continuing education programs. These persons are responsible for providing counseling, career information, testing, and evaluation--as well as conducting registration and enrollment procedures.

> Approximately 3600 persons are assigned to education positions in the armed services . . . Counselors are needed at all levels from elementary through higher education . . . Recognizing the need for new techniques, the services are investigating the automation of some counselor functions to provide quick access particularly in areas such as career-oriented information . . . In-service seminars and workshops are being conducted to provide educational officers with opportunities to update their skills and knowledge . . . As professional standards increase there will be growing demands for in-service training to keep educational officers qualified for their tasks.[116]

Considering the extent of the involvement of the federal government in the training of its employees, including servicemen, it is apparent that government agencies are probably one of the major sources of research in continuing education. According to a recent summary of the state of continuing education research in the United States:

> Studies in the areas of instructional methods, predicting student success, aptitude levels, and technical and occupational training have been done by the U.S. Naval Personnel and Training Research Laboratory in San Diego, California, the U.S. Army Behavioral Science Research Laboratory and the Human Resources Research Office in

> Arlington, Virginia, and the U.S. Air Force Office of Scientific Research Laboratory near Lackland, Texas. The National Center for Educational Statistics, U.S. Office of Education, published statistical data concerning adult basic education programs, higher education noncredit activities, and participation in adult education.[117]

A number of these agencies are part of the military establishment. Armed Forces-sponsored research is particularly concerned with the adult learning process.

> The range of adult learning activities . . . extends from the development of self-instructional materials to the design of instructional systems. Research is undertaken to develop significant knowledge concerning learning processes. Courses are developed to meet specified training objectives and often include procedures for testing, evaluation and feedback. Innovations such as programmed instruction and computer assisted instructional programs are being developed and tested. There is concern for ways of improving the readability of materials. Some research is directed toward developing and testing training strategies which may be appropriate for varying levels within an operational training context. Research is under way to determine the reading, listening comprehension, and arithmetic skills required for major occupational specialities.[118]

It is not surprising that a great many of the research reports collected and abstracted by the ERIC Clearinghouse on Adult Education (another federally funded agency) are the result of federally sponsored research projects. The ERIC system of indexes and abstracts itself is probably the single most important source of information on continuing education research and investigation in the United States today. Reported improvements in the quality, quantity, and visibility of continuing education research can be attributed in large part of the activities

of the Adult Education Clearinghouse, as well as to the existence of the ERIC sponsored publications, Research in Education and Current Index to Journals in Education.

These vast educational activities of the federal government unfortunately are not systematically described, reported, or evaluated. Although many of these programs are probably very traditional and routine, some of them appear to be highly innovative, experimental, and successful. These admirable programs could serve as extremely useful models for the development in the private sector of new educational programs for adults.

Associations

According to one expert, there are more than 12,000 business and professional associations in this country, and almost 10,000,000 Americans active in some sort of business and professional group. Many of these associations participate in the complementary-functional educational system, filling in the gaps in the preparation of their members left by the sequential-unit system.

> . . . the average graduate of our high schools and colleges may possess considerable theoretical knowledge, even vast stores of general knowledge, but it is not related, for the most part, to the exigencies of private life. For this reason associations have more than tripled their efforts in education in the past ten years and will more than likely multiply their current educational activities by several times in the coming ten years.[119]

Although there is some evidence that younger professionals (especially if they live in cities and were at the top of their class) prefer

graduate courses, the older professionals turn first to their professional associations for their educational needs.[120]

Associations are logical agencies to assume a strong role in continuing education for several reasons. Associations are focal points for the gathering and dissemination of information which makes them a natural source of continuing education for their members. They are able and willing to offer high-quality education to their members at a cost often far below the market price for commercial programs of the same quality. Associations are often more open to technological advances which make it possible to take educational programs to the learner, rather than requiring the reverse, as is traditional in colleges and universities. They are aware that many of their potential students are older people who have been out of college for some time and are willing and able to design programs suitable for this group's capacities. They naturally assume that their programs must be designed in small doses and offered at convenient locations and reasonable times.

Finally, associations have a "built-in acceptance factor" with their membership which other institutions would find difficult to match at any cost. "Programs offered by the association can be guaranteed almost instant acceptance if they are sound in their development and relevant to the needs and wants of the membership."[121] The association also enjoys a "built-in acceptance factor" in the area of government-assisted educational programs, "because associations represent the interests of whole industries or professions in most instances and therefore the government views its

use of the association as an ideal means of doing the most good with the least effort."[122]

There are two basic types of business and professional associations, with a few variations.

> Associations composed of individual members (i.e. people) generally are professional or occupational speciality associations, usually called individual membership socities. Examples are the American Medical Association, the American Bar Association, the Public Relations Society of American, the American Society of Real Estate Appraisers, . . . Associations composed of artificial entities (i.e. corporations, firms, or institutions) are trade associations. Examples are the National Association of Wholesalers, the American Retail Federation, the Paper Shipping Sack Manufacturers Association, and the National Consumer Finance Association. Of course, there are variations of these two types of associations, such as the true federation and the vertically aligned association as compared to associations that are, for all practical purposes, horizontally aligned, but true trade and individual member associations make up the mainstream of association structure.
>
> Associations can also be described in geographical terms. There are national, international, state, regional and local (i.e. metropolitan) associations.[123]

There tend to be distinct differences in the way the two basic types of associations approach continuing education.

> Typically, a trade association is concerned with the education of two types of individual--the entrepreneurs who run the corporations and firms that compose its membership and the employees of its members. Trade association activities for official representatives of corporate members are most often related to entrepreneurial skills such as finance, policy-making, corporate planning, budgeting, and other activities carried on at high levels of corporate

> life. In recent years a good deal of attention has been paid to the "people skills" of corporate captains and are frequently the focus of programs conducted by associations.
>
> Employees of trade association members are often eligible to participate in programs geared to the particular area of specialty that makes him valuable to his employer. Examples of such programs are advanced concepts in estimating, new trends in personnel administration, training program development, and so on. Considerable attention has also been devoted to the people skills of supervisory personnel and other executive personnel considered to be mobile in an upward direction within a corporate infrastructure.
>
> In short, the programs offered by trade associations are concerned with making the individual employee of the corporate member a more productive unit whether he be a high-ranking corporate officer or an hourly employee.
>
> Associations comprised of individuals engaged in the professions or the near professions take a fundamentally opposite approach to the matter of education of their members. Whereas trade associations are concerned almost exclusively with education as a means to increase an individual's worth to his company, the individual membership society is concerned with increasing the individual's skills and knowledge to enhance his ability to practice his chosen profession in almost any locale or environment. It is not unusual in this respect to see educational programs of individual membership societies related to some form of certification or to the maintenance of professional credentials. This is not to imply that trade associations are not concerned with the individual as an individual. The basic structure of the association is such that education can be related to corporate benefit primarily with individual benefit a secondary but important concern.[124]

Individual membership associations typically offer a wide range of general membership services--many with educational aspects. Among the

usual membership services are: promoting professional awareness, recruiting new people to the profession, operating job placement services, arranging fraternal and social events, providing opportunities for members to exchange technical information, publishing journals and newsletters, organizing group benefits such as travel and insurance programs, accrediting professional schools, certifying professional practitioners, providing reference and/or lending library services, and sponsoring continuing education events.

During the current recession many associations have been revising their general operations to make their total programs more relevant to membership needs. Some typical changes are to regionalize meetings and emphasize chapter activities, drop banquets and other ceremonial events, tighten up the annual meeting schedule to trim the time commitment required, and streamline the organizational heiarchy in order to give new and younger people faster access to positions of influence.[125]

Societies in the field of science and technology recently have expanded their services to assist their members in finding and preparing for new jobs. For example, the Engineers Joint Council has recently launched a computerized job placement service through the College Placement Council, stepped up its employment counseling activities, and has been meeting with industrial executives to spell out guidelines for use in hiring engineering talent.[126]

Many associations which have reshaped their membership services are apparently thriving. Two outstanding examples of membership growth are

the National Society of Professional Engineers (3,000 new members in 1971-72) and the American Institute of Certified Public Accountants (a ten percent increase in new members annually for the last few years). Leonard M. Savoie of the AICPA feels that his organization's "aggressive work in the field of standard-setting (the institute prepares and grades the national CPA examination) might well explain the continuing growth of the 85-year-old organization."[127] (The AICPA is also extremely active in continuing education.)

As they turn away from some of their former activities, many associations are developing more extensive educational programs. In the science and engineering field, the activities of professional associations cover a wide range of services which might be adaptable to other professions.

> While professional societies have always had the responsibility for disseminating information on new developments through publications and meetings, the trend in the current decade has been to develop mechanisms for planning, coordinating, and implementing more organized forms of dissemination and instruction. We may summarize what leading societies are doing as follows:
>
> A. Dissemination of information.
>
> 1. Journals covering new developments, knowledge, and techniques and presenting specific scientific and engineering data.
> 2. Other technical publications, including transactions, proceedings, abstracts and bibliographies, monographs, and other specific and detailed technical information.
> 3. Non-technical publications, containing news both of general interest and specifically pertaining to continuing education as well as technical articles of broad general interest . . .

4. Annual meetings, including both the traditional presentation of papers and discussions and the newer formats of short courses, review, and state-of-the-art papers as part of the meeting.

B. Planning, coordinating, and implementing specific continuing education activities aimed at updating and keeping up to date to overcome or prevent obsolescence.
1. General guides for local chapters or sections for planning continuing education activities from inception to implementation.
2. Specific instructional materials or recommendations for where they can be obtained for local use.
3. Speaker-lecture tours and touring short courses.
4. Surveys of members to determine their needs, interests, and attitudes regarding continuing education. The Society is a mechanism for quickly and readily obtaining information on new developments as well, because of the dispersion of its membership geographically and their involvement in all aspects of the fields or disciplines which the society represents.
5. Cooperative efforts with other societies, universities, and employers in solving problems and meeting the needs in continuing education.

These nine activities are educational in the broadest sense. That is, they alert the individual to new knowledge and technology, make available specific information pertaining to their use, point out the broad implications of these developments, and provide instruction designed to make them readily available to the members.[125]

The Institute of Electrical and Electronics Engineers is an outstanding example of an association which has developed a continuing education program incorporating most of the activities outlined above. Since 1884, the IEEE has been involved in continuing education for its members through its annual meetings and its publications.

> . . . over 100 major annual meetings are held at which approximately 15,000 papers are presented, upwards of 40 Journals and Transactions are published containing

> approximately 35,000 pages of technical (and educational) information . . .[129]

In the 1960's, following the publication of the report of the Joint Advisory Committee on Continuing Engineering Studies, the IEEE decided to expand its continuing education activities through a variety of new methods.

The IEEE program is currently designed to develop and disseminate educational materials of many kinds to both individuals and organizational units. The IEEE offerings to individuals are basically self-study courses but they take many forms--correspondence and packaged self-study courses on technical subjects, correspondence courses prepared by the Management Games Institute, the "Cassette Colloquia" (tapes of panel discussions or paper presentations from annual or local meetings), "Soundings" (a quarterly, highly-edited, compact source of tutorial information on selected subjects of high current interest), specialized bibliographies of significant tutorial papers published by IEEE Groups, and "reprint books."

IEEE programs produced for the use of local sections, chapters, and branches, generally require an organized presentation and classroom-type facilities in order to be most effective. These include one-day short courses (with published notes which are also sold separately to individuals), slide-tape lecture packages, a "Resources Handbook" for the use of local Education Chairmen (which lists and describes educational materials and their sources), and DATE (Dial Access Technical Education--

which provides concise up-to-date fifteen minute reports on the current status of a given segment of technology.

The IEEE has been exploring for future implementation possible ways of providing a more structured continuing education program. They are particularly interested in developing a more formal type of recognition for the time and effort expended by their members. Currently, IEEE is considering a two-pronged approach. First, the association would undertake to provide a series of continuing education "Road Maps" which would lay out the various educational paths an individual might pursue in order to achieve a specific goal--such as updating his 1950 degree to a 1973 degree. Secondly, IEEE would take the responsibility for maintaining a "universal continuing education transcript service" which would record the educational achievements of individuals. Each individual could then demonstrate that he had maintained or upgraded his competence by means of a single record of all university credit courses, in-plant programs, association offerings, and other types of continuing education experiences.[130]

The continuing education activities of the science and engineering societies are far in advance of the majority of professional associations, although there is very little comprehensive data available to confirm this assertion. One of the few available surveys of association education activities was reported in Association Management in 1968.

> Recently a leading university conducted a questionnaire survey to determine the educational needs of trade and professional associations based in Washington, D.C. Four hundred and eighty questionnaires were dispatched to association executives. Seventy-eight percent of

> those questioned responded . . . Significantly, 55 per cent of the respondents indicated that they were using the conference, seminar and institute technique for their educational programs. Fifteen per cent stated they were not using the technique at present but were ready to start. Twenty-four per cent recorded that they were conducting programs in cooperation with colleges and universities.
>
> Summarization of the data showed that trade and professional associations are assuming an expanding role in establishing education programs for their members. Requirements for college and university cooperation in association education programs are increasing.[131]

This survey found that the major education requirements of associations were: management skills, public relations, long range planning, employee selection methods, and marketing methods. Fifty percent of the association executives questioned stated a preference for one-and two-day sessions. Twenty-six percent preferred programs lasting three to five days, and only seven percent indicated a desire for programs of six to ten days. The most popular time periods were spring and fall. The majority of association executives stated that they prefer to conduct educational programs separately from national or regional convention activities.[132]

Although the majority of the executives contacted above preferred to separate their educational programs from their annual conventions, there are associations which make their annual convention the focus of their educational program. Some associations are offering almost exclusively educational fare at their conventions--examples are the Young Presidents'

Organization, the Mechanical Contractors' Association of America and the National Association of Tobacco Distributors. The Young Presidents' Organization alone offers over one hundred workshops and seminars at its convention. Educational programs for spouses are being added at some conventions on the theory that participation in meetings on topics of public and/or professional interest will increase the spouses' satisfaction with the convention more than the traditional fashion shows and shopping tours.[133]

It is obvious that no association can provide all the formal education, informal education, leadership training, and fraternal activities needed by its members. Much of any association's efforts will have to be directed to diagnosing these needs, identifying and publicizing any available courses sponsored by other agencies, stimulating other agencies to offer those educational experiences for which they have special expertise, cooperating with other agencies to develop programs, and, then, designing and offering itself those educational experiences which no other agency would or could do as well as the association.

There are many benefits attached to sharing educational programs with other agencies. Cooperation with federal and state government can mean additional sources of financial support. Since the federal government began financing programs for employee and manpower training in recent years, many associations have been involved in operating government-sponsored training projects, especially through the Department of Labor.[134] (Most of these programs appear to be at the subprofessional or blue-collar level.)

Cooperation with colleges and universities opens the possibility of academic credit being given for continuing education participation. The American Institute of Banking (believed to be the largest privately sponsored adult education program in the country) is attempting "to associate AIB courses with junior and city colleges in an attempt to receive accreditation toward college degree programs.[135]

Cooperation with other agencies can provide more opportunities for practitioners to engage in "task oriented training," which brings together professionals and subprofessionals of several specialities.

> The broader disciplinary and interdisciplinary dimensions of professional practice are being seen in new perspectives, and consequently relevant specialists are being brought together on a task basis. This development is perhaps most visible in the medical and allied health sciences. In university settings, professionals from many areas of health, plus technician paraprofessionals and subprofessionals, are being related on a team basis to a host of interdisciplinary research and service tasks. Heart transplant surgery and post-operative care is only one particularly dramatic illustration. Other professional areas are moving in the same direction. There is heightened recognition of the importance of integrated and systematic teamwork among professionals, technicians, and operatives in general.[136]

Cooperation can help make it possible for an association to expand its educational efforts beyond the direct needs of its professional practitioners. Programs for training paraprofessionals and subprofessionals can be one of the most effective ways of encouraging professional practitioners to spend more time in updating and expanding their professional knowledge. Continuing medical education at Duke has

offered insturction to nurses employed by doctors which enables the nurses to perform many of the routine tasks the doctor normally did in the course of his daily practice.[137] A similar activity is underway in the legal profession, where subprofessional law clerks are being used to permit lawyers to engage in more professional activities, including continuing education.

Once an association has identified the area in which it must create its own programs, then it becomes involved in the complicated and demanding process of program planning. Lowell R. Eklund, Dean of Continuing Education at Oakland University, Rochester, Michigan, has written about the program planning process in university continuing education in terms which are equally applicable to the planning process in the professional association.

> . . . the technological and social pressures of this dynamic free-enterprise society, of which the professional is an integral part, demand the constant systematic application of continuing education. Consequently, the patent crying need is for maximum efficiency and economy in the delivery of this commodity to our customers. This demands that we not only be able to place ourselves on the forward edge of the subject matter and knowledge-finding process, but our methods and strategies for effecting application of this knowledge to the professional's field of operation must be the most modern in which we avail ourselves of every possible existing means as well as constantly seek new and more effective and efficient ones. Dynamic flexibility in relating research findings and knowledge production to the professional marketplace is the essence of our mission.[138]
>
> May I presume to suggest a list of tenents . . . By working closely with our clientele--or our

prospective students--we will first determine their real questions and their genuinely felt needs before we return to our ivory towers to generate the answers. In fact, we will be ever aware that frequently the answers will lie only in the collective knowledge of the students themselves--and may often be only optimal indications rather than black or white unqualified conclusions. In any event, we (working with our clients) will carefully and expertly determine program content and then design the most effective learning experience possible within the limits of our professional competence and creative ingenuity. We (working with our clients) will secure the resource people available--often from the professional group itself. We (working with our clients) will clarefully [sic] and thoroughly consider the various methods of information transfer and structure our program accordingly. We (working with and through our student group) will promote and publicize the event with appropriate flair and dignity so that the audience--the all-important audience--will know then, where and very importantly, why they may avail themselves of the experience opportunity. We then (in close alliance with the clients) will present and administer the program, devoting solicitous attention to every detail of the plan, quickly adjusting or amending as experience dictates. Emphasis will be focused on presenting these programs in the most flexible, regular, timely, convenient, dynamic manner possible, with the highest standards demanded and delivered--not just gratuitously espoused.

Finally, we (in conjunction with our clients) will review and evaluate our programs so that maximum improvements may be made and applied to future programs, which should be readily demanded and forthcoming if we have done our job with imagination and zeal (and in close conjunction with our clients).[139]

Continuing Education--An Overview

Having examined the potential sponsors of continuing education for professionals--university professional schools, community colleges, proprietary schools, corporations, business and industry, unions, federal government agencies, and professional associations--we are left with the problem of allocating the responsibility among them.

The general area of continuing education is one in which there is a great deal of confusion concerning all kinds of responsibility. Liveright, in 1966, identified a number of "adult education policy questions" which ultimately must be answered by society before a logical allocation of continuing education responsibility can be made.

> Among questions that must be answered are: 1) How should costs of retraining workers displaced by changing technology be met? Should costs be viewed as a cost of industry or should government meet some part? What is happening now? 2) What is the most effective kind of pre-employment occupational and vocational training? Should training be broad-based in the schools, with industry responsible for specific job training? How should vocational occupational and specific job training costs be met? 3) Who should be responsible for management development and training? Industry? Management associations such as AMA? The universities and schools of business? What is the most effective means of preparation for managerial responsibility? Or, how should various training and education levels be combined? 4) Should business provide education programs on a profit basis in areas of special competence? Would the Nation's occupational needs be better served through proprietary schools established by major enterprise? If so, how should these costs be met? 5) Is national policy better served by primary contracts between Federal agencies and private business for educational and training

> programs as had been the case with urban Job Corps centers, or should these activities be limited to educational organizations or agencies? What would be the results of any major shift in policy toward private industry.[140]

These are questions which are very difficult to answer. Some of them are being investigated by the Syracuse University Educational Policy Research Center, which has begun a series of studies designed to examine the legal aspects of various potential educational problems in our society. Their second study, published in 1971,

> . . . deals with the case of a highly trained aerospace technician who sues the social security trust for loan benefits, arguing that he is economically disabled and has been retired by society. All the plaintiff wants is an opportunity to retrain himself through education with funds which he believes rightfully belong to him. Seventy percent of the attorneys surveyed are of the opinion that the case will come to court and succeed within 3 years; 70% see the emergence of the concept of life-long education as a right as the primary implication for the future; 80% estimate between 1 and 5 million people would need a similar service by 1980; 75% estimate the cost of such a service to be in excess of $150 million a year; and 85% see the effects of this case, if successful, as beneficial to society.[141]

Since agencies with responsibilities in continuing education cannot wait until these large issues are resolved, they seem to have arrived at a practical consensus regarding the distribution of certain basic responsibilities.

> The literature reflects stereotyped roles, assigned to the individual, his employer, his professional societies, and the universities. While the oversimplication involved will be immediately apparent, these roles should be considered here. Current

> thinking can be summarized as follows: The individual carries the basic responsibility for his own development and for keeping up to date. His employer has the responsibilities of providing both opportunities for continuing education and a work environment--job structure climate that encourages him to keep up to date. The professional societies and universities are obligated to help him by providing educational opportunities and subject matters from which he can select those best fitting his needs. Employers and professional societies, more than universities, share some responsibility for making the man aware of his needs and helping him plan to meet them.[142]

This dependence on the individual to carry the basic responsibility must be tempered by the realization that, so far, individual responsibility has not proved overwhelmingly successful.

> . . . we are not overly impressed with the amount and nature of the planning done by individuals for their own continuing education. We sense a fair amount of "hit-or-miss" activity, especially in choosing professional meetings, short courses and to some extent in reviewing the literature. That is, what planning takes place is usually short-term without regard to the long-run future. While we recognize that no one can know the future, many of the developments now taking place will unquestionably adversely affect the future of those who ignore them. As an example, we point to the inadequacy of many people in dealing with computers whose potential they should have recognized a decade ago as being of relevance to sophisticated research techniques.[143]

In the opinion of this writer, the most effective agency for coordination of the activities of the various sponsors of continuing education is the professional association. The association is also in an exceelent position to motivate its individual members to take advantage of the continuing education activities which it has identified and publicized.

A Model Educational Program for an Association

The educational program of an association should be based on a determination of the scope of the professional field. By establishing a content model and identifying the areas of professional competency, the association establishes what members of a profession are responsible for knowing and doing. Once this is done, a minimal level of competence can be formulated to measure the preparation of beginning professionals. The association should continuously work to identify new knowledge and techniques of which all its professionals should be aware. By estimating the magnitude of this new information the association can create a continuing education standard which will specify how many hours of updating is probably necessary for the average professional per year.

The association should develop a policy on continuing education. The focus of this policy should be on the continuing education needs of the profession for the next twenty or so years. This policy should state the association's support for the development of specific kinds of continuing education activities in the professional schools, community colleges, commercial agencies, and the federal government. The association, by utilizing this policy, can selectively support those activities of other agencies which will lead to the association's desired results.

Once these fundamental standards are established the association can proceed to design its own educational program. Such a program would include the following activities:

1) The association would assist professional schools in designing programs to develop the appropriate competencies in their students.

2) The association would do everything it could to insure that beginning practitioners had reached a minimum level of competence. This might include testing or evaluating individuals.

3) Qualified practitioners could be certified. This certification might be designed to insure a minimum level of competence, or to recognize a high level of achievement. In fact, it might be desirable to recognize competence at several levels.

4) The association would provide a set of standards for employers to use in hiring professionals and endeavor to have these standards recognized and enforced.

5) The association would take steps to promote the participation of its members in continuing education of all kinds.

a) Publicize how much education is necessary for the average professional to remain current.

b) Act as a clearinghouse for educational opportunities available to practitioners which would contribute to their competence. Many associations do this by publishing a catalog or newsletter of educational programs.

c) Provide assistance in selecting appropriate subjects and courses to improve individual competence. This might involve the development of various methods of measuring

competence, such as self-assessment tests. It could also mean the development of a professional guidance and counseling service.

d) Participate in national efforts to systematize the programing and credentialling of continuing education, especially the development of a standard continuing education unit.

e) Engage in recording the continuing education participation of members (until such time as a better system is created). This would involve evaluating the reported experience in order to record the appropriate amount of credit.

f) Develop several forms of recognition to award to outstanding participants.

g) Promote an awareness among employers of the importance of continuing education. Encourage them to support and reward their employees' participation.

6) Provide a "professional development program."

a) for beginning professionals who need to expand and deepen their knowledge of material introduced in professional school. This could be part of preparing the beginner to reach a level of minimum competency, such as the short courses offered to candidates for CPA and Bar examinations.

b) aid older professionals to gain basic knowledge not available when they went to professional school.

c) design educational programs to offer information about new knowledge and techniques.

The association should offer professional development courses in areas of professional concern which are appropriate because they involve

a) Knowledge which is too specialized for professional schools to teach (faculty may not be familiar with content).

b) Knowledge which is too current for professional schools (faculty may not be aware of content).

c) Knowledge which the association can provide better than any other source--i.e., members are the ones engaged in the most advanced work in the subject.

d) Knowledge which no other agency can provide to as many members as efficiently--such as small amounts of management or human relations training.

7) Stimulate other agencies to offer relevant programs which would be appropriate to their abilities.

a) community or junior colleges--

subprofessional or paraprofessional basic knowledge, technical courses to broaden a professional's background (such as medical terminology in an allied health program), basic courses in outside areas of knowledge

such as foreign languages or data processing.

b) universities--

any basic courses not taken for the first professional degree, management or personnel administration courses, advanced degree work, courses through the extension or correspondence division.

The association should encourage one or more universities to create Masters and Post-masters degrees in the profession which could be achieved through a structured program of short courses, institutes, evening and/or correspondence courses. These classes might be conducted jointly by the professional school and the extension division.

c) proprietary schools--

subprofessional and paraprofessional certificate or diploma studies.

d) corporations--

educational games, simulation exercises, management programs, programmed texts, and correspondence courses.

e) state and federal agencies--

employee training programs for their own employees, training programs funded or administered through various agencies.

f) other associations--

cooperative programs, training for paraprofessionals and subprofessionals.

For organizations developing programs in areas of professional knowledge the association should serve as a general advisory and planning committee, representing the needs of the profession and providing the most advanced available professional knowledge. It should be able to advise other agencies on the objectives, subject content, format, and length of any professional program to be established. It should also be able to recommend instructors and resource persons persons in the field, as well as to suggest methods of presentation which should be especially effective with the prospective students. The association should bring relevant programs to the attention of the profession and assist in marketing them. Finally, it should be available to assist in the evaluation of the programs after they are held.

This range of activities would constitute the educational program of the association, with the association's own "professional development" courses as a subdivision of the over-all continuing education effort.

FOOTNOTES

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